



# 53D Wing Safety

## ~~101~~ Critical Days of Summer



*All Terrain*  
*Vehicles*  
SAFETY...It's an ATTITUDE





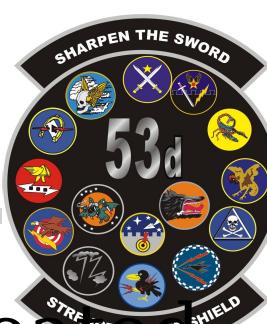
# All-Terrain Vehicles



- All-terrain vehicles (ATV), also known as three- and four-wheelers, were first built in Japan for use in isolated, mountainous areas. It wasn't long, however, before ATVs became popular recreational vehicles here in America. And although ATVs continue to provide their riders with "thrills," many don't understand how to properly balance the risk and pleasure of riding the trails.



# All-Terrain Vehicles



- As many as 90,000 individuals were treated in hospital emergency rooms for ATV-related injuries during 1995, according to The Consumer Product Safety Commission. Nearly 10,000 of those were hospitalized, and more than 120 died of their injuries.
- Nearly half of the injuries and fatalities occurred to riders under 16 while 20 percent of the fatalities were children under 12. ATVs are not toys, and children under 12 should not operate or ride on one. Such young riders often lack the size and strength to safely control an ATV.



# All-Terrain Vehicles



- While riding an ATV can be dangerous, it doesn't have to be--so long as you properly balance the risks and pleasures involved. Fortunately, it's mostly a matter of good old common sense.
- Consider the trails you'll be on, and ask yourself if you'll be encountering any terrain or environmental hazards





# All-Terrain Vehicles

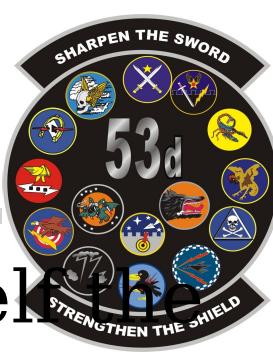


- Give special attention to terrain features such as roads, slopes, canals, ditches, blind intersections, trees, shrubs, other vehicles, etc., that might cause accidents. It's difficult to avoid potential accident situations if you're not aware of the hazards.



# All-Terrain Vehicles

To safely enjoy riding the trails, ask yourself the following questions:



## ***Am I ready to ride?***

- Don't be an unprepared operator, and don't permit others to operate an ATV if they are not prepared. A hands-on training course, given by a competent instructor, is necessary for all ATV operators. Riders should also be physically strong and emotionally mature. Inexperienced operators, in their first month of using an ATV, have 13 times the average risk of injury!



# All-Terrain Vehicles



- Be familiar with the ATV owner's manual, particularly with the operation and safety aspects.
- Be alert, awake, and clear-headed.
- Have all appropriate personal protective equipment ready to wear.





# All-Terrain Vehicles



## *Is the ATV ready?*

- This is more than having enough fuel and starting the engine. The ATV should be maintained in accordance with the owner's manual.
- Give special attention to the tires, brakes, and throttle. The tires must be uniformly inflated (2 to 6 psi); a 1-pound difference in air pressure can cause control problems. To accurately measure pressure, you will need a low-pressure gauge--regular tire gauges will not be accurate enough.



# All-Terrain Vehicles



- The brakes must be adjusted to ensure a safe, straight stop. Make sure the throttle operates smoothly in all steering positions. Regularly check all bolts and nuts, particularly the axle and wheel lug nuts. When a wheel is changed, the lug nuts should be tightened every 2 hours until they set.



# All-Terrain Vehicles



- Do not ride double; the unique handling characteristics of the ATV require operators to shift their weight and position on the seat to steer and control the vehicle. Riders hamper the operator's ability to steer and control the ATV.



# All-Terrain Vehicles



- Helmets (should bear the American National Standards Institute label ANSI Z90.1 or equivalent), heavy gloves, and boots should always be worn. Without the protection of a helmet, the risk of severe injury or death is twice as high.
- Since ATVs are small and low to the ground, they are not as visible as larger vehicles. Use lights, reflectors, and highly visible flags so the ATV is easier to see.



# All-Terrain Vehicles



- Never ride the ATV on public roads or after taking alcohol or drugs. In nearly 10 percent of all injuries and in 30 percent of all fatal ATV mishaps, alcohol use was a contributing factor.
- Don't attempt things beyond your ability! If you come upon a trail riding area or situation where you're not sure of how to handle the ATV or what you would do in a worst-case scenario, don't do it!



# All-Terrain Vehicles



- **Take a minute and think:**
- Is my ability up to it?
- Is the ATV up to what I'm trying?
- Am I by myself? How far away is help?  
Traveling with a buddy (on a second ATV) is the safe way. An accident far from help can result in a minor injury becoming serious, and a serious injury may become a fatality.

Go ahead only after you're satisfied you can deal with the consequences of your actions!



# All-Terrain Vehicles



- You'll have more success climbing over obstacles by approaching them straight-on. This holds true for downed trees as well as hill climbing.
- With 4X4 ATVs, approach the obstacle very slowly. Once the wheels are touching it, give enough throttle to slowly crawl over the obstacle. (Not too much throttle, or you may end up doing an out-of-control wheelie.)
- When your front wheels pass over the obstacle, keep the momentum going so your rear tires will make it also.



# All-Terrain Vehicles



- Don't traverse a hill sideways. Always climb straight up or straight down a hill--never try to climb at an angle. Your ATV's weight and the spinning wheels can cause you to slide further sideways than you intended. Depending on the steepness of the slope, sliding sideways can cause ATVs to roll over.



# All-Terrain Vehicles



- Turning around: NEVER attempt to turn around on a steep, narrow trail. If the terrain is unstable and your ATV gets sideways, there's a chance it could start to roll over. If you fail to climb the hill, grab your brakes hard immediately. If possible, put the ATV in reverse, then let the engine compression and front brakes slow you while you back straight down the hill.



# All-Terrain Vehicles



- **WEAR THE RIGHT GEAR**
- **Head protection.** A helmet is the most important piece of safety gear for an ATV operator. If designed for ATV use, a helmet can prevent serious head injuries.
- Helmets used for bicycling, skateboarding, and rollerblading should not be used on ATVs because they lack face protection and the ability to absorb energy on impact.



# All-Terrain Vehicles



- Look for helmets with a label from the American National Standards Institute, Department of Transportation, or the Snell Memorial Foundation to verify that the helmet has been safety tested.
- The helmet also must be able to resist a blow from a sharp object, stay in place, and provide a minimum amount of peripheral (side) vision. Correct size is essential, especially for young operators.



# All-Terrain Vehicles



- **Eye protection.** A face shield may be part of the helmet. If not, wear an ANSI-approved pair of goggles or glasses with hard-coated polycarbonate lenses. This will protect your eyes from rocks, twigs, branches, flying dirt, insects, or water, that can cause you to lose control or damage your eyes.



# All-Terrain Vehicles



- **Body protection.**
- Gloves protect hands from scrapes and scratches, improve grip on the controls, and reduce soreness from the pressure of holding onto the handle bars.
- Boots protect feet from trail debris and keep feet properly placed on the footrest, which is important in maintaining balance and control of the ATV.



# All-Terrain Vehicles



- Also recommended are a sturdy, long-sleeved shirt or jacket and long pants to protect arms and legs from cuts or scrapes caused by trail debris and branches. Proper clothing also protects the operator from problems caused by weather conditions, including sunburn and frostbite.
- Optional gear, worn by professional riders, includes a padded jersey and shin guards.



# All-Terrain Vehicles



- Know what's ahead. Know what to expect from the trail you're riding on and how difficult it is prior to getting there. If you're not sure of the trail conditions, be prepared for the worst.
- Although it seems ATVs, by their very nature, can be dangerous, they're also exciting and fun. If the ATV is properly maintained, if the operator is adequately trained, properly clothed and equipped and has weighed all the risks for maximum safety, then riding the trails can be a pleasure indeed.